

Case No.: INFAN-053A

## BABY GYM/BOUNCER

### CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] The present application claim priority to U.S. Provisional Application Serial No. 60/501,762 entitled BABY GYM/BOUNCER filed September 10, 2003.

### STATEMENT RE: FEDERALLY SPONSORED RESEARCH/DEVELOPMENT

[0002] (Not Applicable)

### BACKGROUND OF THE INVENTION

[0003] The present invention relates generally to a seat for an infant, and more particularly to a collapsible baby gym-bouncer for use in calming and/or entertaining an infant with a collapsible toy bar mounted upon a collapsible rocker frame that, when each is folded to a collapsed position, causes the baby gym-bouncer to assume an extremely narrow or thin cross-sectional profile which enhances its transportability and storability.

[0004] There is currently known in the prior art infant seats that provide the feature of rocking an infant supported therein in order to calm the infant. Such infant seats, commonly referred to as "baby bouncer" seats, typically comprise a base frame having an inclined seat frame extending upwardly from the base frame. The base frame is adapted so that it may be placed on a floor or a table. The seat frame is typically connected to the base frame or integrally formed therewith in a manner that

allows the seat frame to be resiliently deflectable downwardly such that the seat frame may be oscillated or rocked up and down in order to sooth the infant. A soft, fabric covering may be extended across the seat base so that the infant may be comfortably supported in an inclined position. Some baby bouncer seats are configured to be collapsible wherein the seat frame and base frame may be folded against each other in order to reduce the overall size of the baby bouncer seat to enhance its compactability.

**[0005]** Although baby bouncer seats of the prior art are generally effective in gently supporting and rocking infants in a seating position, such baby bouncer seats suffer from several deficiencies that detract from their overall utility. For example, although generally collapsible to a reduced size, the arrangement of the frame structures and the quantity and configuration of fittings does not allow for the collapse of such prior art baby bouncer seats into an extremely small size as is better suited for storage and transportability. Furthermore, once collapsed, the frame structure and fittings of such prior art baby bouncer seats may protrude or project outwardly such that the baby bouncer seat is susceptible to snagging or interference with nearby persons or property when the baby bouncer seat is carried about or stored in confined spaces.

**[0006]** The present invention addresses the above mentioned deficiencies by providing a baby gym-bouncer that is specifically sized and configured to be collapsible to an extremely thin cross-sectional profile while providing the feature of oscillating motion and the functional attribute of a toy bar to respectively sooth and entertain an infant.

## BRIEF SUMMARY OF THE INVENTION

[0007] The present invention provides a baby gym-bouncer comprised of a base assembly, a seat assembly, a toy bar assembly and a handle assembly. The base assembly and seat assembly are pivotally connected to each other at the handle assembly. The toy bar assembly is pivotally connected to the seat assembly on opposing sides thereof.

[0008] The seat assembly may be placed into a bouncer position by rotating the seat assembly away from the base assembly. In the bouncer position, an infant may be rocked up and down to sooth the infant. Alternatively, the seat assembly may be placed into a gym position wherein the seat assembly is folded down into contact with the base assembly. In such a position, the infant may be placed on the seat assembly resting face-up or in a sitting position such that the infant can interact with toys suspended from the toy bar assembly.

[0009] When the toy bar assembly is fully collapsed onto the seat assembly and the seat assembly is fully collapsed onto the base assembly, the baby gym-bouncer assumes a generally rounded or elliptical, planar-shape with a very thin cross-sectional profile. Furthermore, in the fully collapsed position, the seat assembly may be mechanically secured to the base assembly by means of a zipper extending about perimeters of the seat assembly and base assembly such that the seat assembly and the base assembly collectively define an interior compartment. Various items such as the toys from the toy bar may be inserted and carried within the interior compartment.

[0010] The base assembly is comprised of an arch-shaped base frame that is pivotally captured within the handle

assembly. The seat assembly is shaped complementary to the base assembly. The base frame is encased by a base frame padding fabricated from elastomeric material such as low-density foam to provide cushioning against relatively harder material of the base frame. The base frame padding is, in turn, encased in a base frame cover fabricated from a soft, low-density material such as cotton. A base panel, which extends across the base frame, is fabricated from a flexible material. The seat assembly has a seat frame with a pair of flex loops and seat frame end portions that extend through a pair of seat frame tracks formed in opposite ends of the handle assembly. The flex loops are configured to allow the seat assembly to be resiliently deflectable downwardly toward the base assembly to provide the bouncing or rocking feature.

**[0011]** The seat frame is constructed in a manner similar to the construction of the base frame in that the seat frame is substantially encased by a seat frame padding that, in turn, is encased by a seat frame cover. A seat panel extends across the seat frame and is fabricated from a soft, flexible material such as cotton upon which the infant may sit or lie. Retaining straps are included with the seat assembly to support the infant against gravitational forces that would otherwise cause the infant to slide downwardly along the seat panel when the seat assembly is inclined.

**[0012]** The handle assembly includes an upper shell and a lower shell with the seat frame tracks being formed in opposing ends of the handle assembly. The seat frame end portions extend through the seat frame tracks to allow the seat frame to be rotatably mounted on an axle captured inside the handle assembly. Each one of the seat frame

tracks includes a lower detent and an upper detent that allow for selective positioning of the seat frame in the gym position or in the bouncer position. The handle assembly has a handle opening to allow a user, such as a parent, to grasp and carry the baby gym-bouncer.

[0013] The toy bar assembly is constructed in a manner similar to the base assembly and seat assembly in that the toy bar assembly has a toy bar frame encased by toy bar padding that is, in turn, encased by a toy bar cover. The opposing ends of the toy bar frame are pivotally connected to the seat frame. The toy bar assembly may be positioned into a variety of angular positions relative to the seat assembly and may be folded down against the seat assembly in abutting contact with the seat assembly so as to increase the overall compactness of the baby gym-bouncer.

#### BRIEF DESCRIPTION OF THE DRAWINGS

[0014] These, as well as other features of the present invention, will become more apparent upon reference to the drawings wherein:

[0015] Figure 1 is a perspective view of the baby gym-bouncer of the present invention in its operative, fully uncollapsed state;

[0016] Figure 2 is an partially exploded perspective view of the baby gym-bouncer illustrating the interconnectivity of a base assembly, a seat assembly, a toy bar assembly and a handle assembly as well as other components that make up the baby gym-bouncer;

[0017] Figure 2a is a perspective view of an upper shell of the handle assembly illustrating a pair of seat tracks formed therein;

[0018] Figure 2b is a partial cross sectional view of the upper shell and a lower shell taken along line 2b-2b of Fig. 2a and illustrating the manner in which the upper and lower shells collectively form the handle assembly and further illustrating a pair of seat tracks formed in the upper and lower shells to allow selective positioning of the seat frame assembly between a gym position and a bouncer position;

[0019] Figure 3 is a perspective view of the baby gym-bouncer in a partially collapsed state with a toy bar thereof being oriented in its operative state and illustrating toys suspended from the toy bar;

[0020] Figure 4 is a perspective view illustrating the baby gym-bouncer in its fully collapsed state and further illustrating the manner in which toys from the toy bar may be placed inside an interior compartment of the fully collapsed baby gym-bouncer; and

[0021] Figure 5 is a side view illustrating the manner in which the fully collapsed baby gym-bouncer may be carried using the handle assembly.

#### DETAILED DESCRIPTION OF THE INVENTION

[0022] Referring now to the drawings wherein the showings are for purposes of illustrating the present invention only, and not for purposes of limiting the same, the subject invention is directed to a baby gym-bouncer 10 that is configured to be collapsed to an extremely narrow or thin cross-sectional profile which enhances its

transportability and storability. As best seen in Fig. 1 in its fully uncollapsed state, the baby gym-bouncer 10 is comprised of a base assembly 12, a seat assembly 30, a toy bar assembly 50 and a handle assembly 70. The base assembly 12 is connected to the handle assembly 70. The seat assembly 30 is pivotally connected to the handle assembly 70 as is shown in Fig. 2 and as will be described in greater detail below. The toy bar assembly 50 is pivotally connected to the seat assembly 30, as may also be seen in Fig. 2 and as will also be described below.

[0023] In Fig. 1, the baby gym-bouncer 10 is illustrated with the seat assembly 30 being upwardly angled or inclined relative to the base assembly 12 such that the seat assembly 30 is positioned into a bouncer position 86. When placed into the bouncer position 86, an infant supported by the seat assembly 30 may be rocked up and down. In Fig. 3, the baby gym-bouncer 10 is illustrated with the seat assembly 30 being folded down into substantially abutting, coplanar contact with the base assembly 12. In such a position, the seat assembly 30 assumes a partially collapsed position or a gym position 88. When the baby gym-bouncer 10 is placed into the gym position 88, the infant may be placed on the seat assembly 30 resting face-up or in a sitting position. While the infant is so positioned, the infant can interact with toys 66 suspended from the toy bar assembly 50. The toys 66 may be releaseably engaged to the toy bar assembly 50 through the use of toy straps 68. However, the toys 66 may be connected to the toy bar assembly 50 using a variety of alternative means. Although three toys 66 are illustrated, any number of toys 66 can be provided.

**[0024]** The toy bar assembly 50 is shown in Fig. 1 as being positioned into a substantially vertical orientation such that the toys 66 are within comfortable reach of the infant. However, the toy bar assembly 50 is configured to be selectively oriented into a number of alternative angular positions relative to the seat assembly 30 due to the configuration of the pivotal connection of the toy bar assembly 50 to the seat assembly 30, as will be described in greater detail below. Furthermore, the toy bar assembly 50 is sized and configured to be complementary to the seat assembly 30 such that the toy bar assembly 50 may be fully collapsed or folded down onto the seat assembly 30. When the toy bar assembly 50 is placed into the fully collapsed position and the seat base assembly 12 is placed into the gym position 88 (i.e., fully collapsed relative to the base assembly 12), the baby gym-bouncer 10 assumes a generally rounded, planar-shape with a substantially narrow or thin cross-sectional profile.

**[0025]** In the fully collapsed position, the seat assembly 30 may be mechanically secured to the base assembly 12 by means of a fastening mechanism 102 such as a zipper 94 extending from opposing ends of the handle assembly 70 around respective perimeters of the seat assembly 30 and base assembly 12. Although other fastening mechanisms may be utilized, the zipper 94 is preferably utilized to hold the seat assembly 30 and the base assembly 12 together at their respective perimeters such that they may collectively define a substantially enclosed interior compartment 48. Various items such as the toys 66 from the toy bar assembly 50 may be inserted and carried within the interior compartment 48 in manner similar to that shown in Fig. 4. By providing the fastening mechanism 102 such as the zipper



94, the seat assembly 30 and the base assembly 12 may be partially separated using a zipper pull 96 to provide access to the interior compartment 48 for insertion or removal of various items.

**[0026]** Referring still to Figs. 1 and 2, the base assembly 12 is comprised of a base frame 14 having a base frame main portion 16 and base frame end portions 18. As can be seen in Fig. 1, the base frame main portion 16 is generally arch-shaped although it is contemplated that the base frame main portion 16 may be configured into a rectangular shape, a square shape or any number of alternative shapes. The seat assembly 30 is preferably shaped complementary to the base assembly 12 in order to facilitate the securement of the seat assembly 30 thereto. Each of the base frame end portions 18 extends inwardly from the base frame main portion 16 so as to be disposed in substantially coaxial alignment to each other. The base frame end portions 18 may be spaced apart from each other to define a gap therebetween, as is shown in Fig. 2. However, the base frame 14 may be configured as a continuous loop comprising an arch-shaped, base frame main portion 16 and a single, generally straight, base frame end portion 18 that is adapted to be engagable to the handle assembly 70.

**[0027]** Preferably, the base frame 14 is configured as a unitary structure wherein the base frame main portion 16 and each of the base frame end portions 18 define a continuous length of material. Each one of the base frame end portions 18 is configured to pivotally engage a complementary aperture or bore formed in the handle assembly 70. The base frame 14 may have a generally rounded or tubular cross-sectional shape and may be fabricated of any material having sufficient strength and

stiffness for supporting loads imposed by the infant when rocked or bounced in the baby gym-bouncer 10. In this regard, the base frame 14 may be fabricated from a variety of materials including, but not limited to, steel, aluminum, plastic and fiberglass or any combination thereof.

**[0028]** As shown in Fig. 2, the base frame 14 may be substantially encased by a base frame padding 20 extending substantially continuously about the base frame main portion 16. The base frame padding 20 may be configured with a tubular cross-sectional shape having an inner diameter that is sized to be complementary to an outer diameter of the base frame 14. The base frame padding 20 is preferably fabricated from an elastomeric material such as low-density foam or rubber in order to provide a soft, cushioning effect against the relatively harder material utilized to fabricate the base frame 14.

**[0029]** In this manner, the base frame 14 prevents the infant from directly contacting the base frame 14 which may result in injury. The base frame padding 20 may, in turn, be encased in a base frame cover 22 that extends substantially continuously along the base frame padding 20. The base frame cover 22 is preferably fabricated from a soft, low-density material such as nylon, cotton or flannel although any other soft material may be utilized. Opposing ends of the base frame padding 20 and the base frame cover 22 are preferably configured to extend around the base frame 14 such that the opposing ends terminate proximate to or in substantially abutting contact with opposing sides of the handle assembly 70, as can be seen in Fig. 1.

**[0030]** Included with the base assembly 12 is a base panel 24 that extends across the base frame 14. The base panel

24 may be fabricated from a soft, flexible material such as cotton or nylon. However, the base panel 24 may be fabricated from any material having sufficient strength and durability to contain objects placed in the interior compartment 48 which is collectively defined by the seat assembly 30 and the base assembly 12 when secured together by the fastening mechanism 102. The base panel 24 and base frame cover 22 may be attached together by means of a seam extending continuously along an interior perimeter of the base frame cover 22. However, the base panel 24 and the base frame cover 22 may be formed as a unitary layer. In addition, the base frame cover 22 and base panel 24 may be configured to be removable to facilitate washing thereof.

**[0031]** Referring still to Figs. 1 and 2, the baby gym-bouncer 10 further comprises the seat assembly 30 having a seat frame 32 with a seat frame main portion 34 interconnected on each end by a flex loop 40 to a pair of seat frame end portions 36. Similar to the configuration of the base frame 14, the seat frame 32 is configured as a unitary structure wherein the seat frame main portion 34, the flex loops 40 and the seat frame end portions 36 define a continuous length of material. As can be seen in Figs. 1 and 2, the seat frame main portion 34 is generally arch-shaped and is preferably shaped and sized to be complementary to the base frame main portion 16 in order to facilitate the securement of the seat assembly 30 to the base assembly 12.

**[0032]** Each one of the seat frame end portions 36 has a generally straight configuration. The seat frame end portions 36 extend into the handle assembly 70 through a pair of seat frame tracks 82 formed in opposite ends of the handle assembly 70. Each one of the seat frame end

portions 36 terminates in an eyelet 38. As will be explained below, each one of the eyelets 38 is configured to be mounted on an axle 78. The axle 78 is captured within the handle assembly 70. In this manner, the eyelets 38 may pivotally engage the axle 78 allowing the seat assembly 30 to be pivotally moved between the gym position 88 and the bouncer position 86.

**[0033]** Each one of the flex loops 40 is disposed between the seat frame main portion 34 and one of the seat frame end portions 36 on opposing sides of the seat assembly 30. The flex loops 40 are configured to allow the seat assembly 30 to be resiliently deflectable downwardly toward the base assembly 12. In this regard, the flex loops 40 may cooperate with a generally flexible nature of the seat frame 32 in order to provide a bouncing feature to the baby gym-bouncer 10. As can be seen in Fig. 2, the flex loop 40 generally comprises an approximate 360 degree turn in the seat frame 32 material. The seat frame 32 may have a generally rounded or tubular cross-sectional shape and may be fabricated of any material including, but not limited to, steel, aluminum, plastic and fiberglass and may be configured with a solid or tubular cross-sectional shape or any combination thereof. In addition, the flex loops 40 may be configured in any number of alternative shapes such that the seat assembly 30 is resiliently flexible relative to the base assembly 12.

**[0034]** The seat frame 32 is constructed in a manner similar to the construction of the base frame 14 in that the seat frame 32 is substantially encased by a seat frame padding 42 that extends substantially continuously about the seat frame main portion 34. The seat frame padding covers the flex loops 40 and partially extends over the seat frame end

portions 36. Preferably, the seat frame padding 42 terminates proximate to or in substantially abutting contact with the handle assembly 70. The seat frame padding 42 may have a tubular cross-sectional shape with an inner diameter that is sized to be complementary to an outer diameter of the seat frame 32. In addition, the seat frame padding 42 may be slightly enlarged in the area of the flex loops 40 to accommodate the relatively increased size of the seat frame 32 at the flex loops 40. The seat frame padding 42 is preferably fabricated from an elastomeric material such as foam or rubber in order to prevent direct infant contact with the seat frame 32.

**[0035]** A seat frame cover 44 encases the seat frame padding 42 and extends substantially continuously along a length of the seat frame padding 42. The seat frame cover 44 is preferably fabricated from a soft, low-density material such as nylon, cotton or flannel. A seat panel 46 extends across the seat frame 32 and may be fabricated from a soft, flexible material such as cotton or nylon. The seat panel 46 provides a substantially planar padded surface upon which the infant may sit or lie. The seat panel 46 may optionally include a layer of padding to form a cushioned surface against which the infant may comfortably bear. In a manner similar to that described above for the base assembly 12, the seat panel 46 and seat frame cover 44 may be secured together by means of a seam extending continuously along an interior perimeter of the seat frame cover 44. However, the seat panel 46 and the seat frame cover 44 may be formed as a unitary layer. Optionally, the seat frame cover 44 and seat panel 46 may be configured to be removable to facilitate washing thereof.

[0036] Retaining straps 98 may be included with the seat assembly 30. The retaining straps 98 may extend through a series of apertures or slots 26 formed through the seat panel 46, as can be seen in Fig. 1. The retaining straps 98 are configured for supporting an infant against gravitational forces that are imposed thereupon when the baby gym-bouncer 10 is inclined as occurs in the bouncer position 86. The slots 26 are preferably positioned and oriented in the seat panel 46 such that the retaining straps 98 extend around the infant in diaper-like fashion to hold the infant in the mid-torso area. By configuring the slots 26 and the retaining straps 98 in this manner, the infant is prevented from sliding downwardly on the seat panel 46 when the seat assembly 30 is inclined.

[0037] The retaining straps 98 may be secured to the seat panel 46 by sewing or by simply passing the retaining straps 98 through the slots 26 unsecured to the seat assembly 30. The retaining straps 98 may be fabricated of soft material such as cotton in order to minimize pressure or abrasion against tender skin of the infant. A layer of padding may be included with the retaining straps 98 to provide increased cushioning. As is shown in Fig. 1, a pair of buckles 100 may be included such that the retaining straps 98 may be easily looped around legs of the infant. The retaining straps 98 may be alternatively connected and disconnected by simply mating and de-mating complementary halves (i.e., male and female connectors) of the buckles 100. When the baby gym-bouncer 10 is placed in the gym position 88 shown in Fig. 3, the retaining straps 98 may be altogether removed from the seat assembly 30. In this manner, the seat panel 46 provides a smooth surface that is free of protuberances that may otherwise harm the infant.

[0038] Referring to Figs. 2, 2a and 2b, the handle assembly 70 includes an upper shell 74 and a lower shell 72. A pair of seat frame tracks 82 is formed in opposing ends of the handle assembly 70. As best seen in Figs. 2a and 2b, the seat frame tracks 82 are formed in mirror image to each other through the upper and lower shells 74, 72. As was earlier mentioned, the seat frame end portions 36 extend through the seat frame tracks 82 with the eyelets 38 being rotatably and axially slidably mounted on the axle 78. Each one of the seat frame tracks 82 includes a lower detent 92 and an upper detent 90 connected by a seat frame track slot 84 that is upwardly angled along a direction A from the lower detent 92 to the upper detent, as shown in Fig. 2b. The seat frame track slots 84 are oriented relative to each other so as to be angled outwardly away from each other in the direction A. The seat frame track 82 is sized to allow the seat frame end portions 36 to freely travel from the upper detent 90, through the seat frame track slot 84, and to the lower detent 92, or vice versa, to allow for selective positioning of the seat frame 32 in either the gym position 88 or in the bouncer position 86.

[0039] The upper shell 74 may be secured to the lower shell 72 with fasteners 62 such as screws so that the handle assembly 70 may be easily assembled or disassembled. However, the upper shell 74 may be secured to the lower shell 72 by alternative means such as by complementary mating snaps that may be injection molded into each of the upper and lower shells 74, 72. Such mating snaps may also serve to align the upper and lower shells 74, 72 to each other during assembly. As was earlier mentioned, the axle 78 is secured inside the handle assembly 70. The eyelets

38 of the seat frame 32 are pivotally mounted upon the axle 78 which may be supported by a complementary set of bosses formed or molded into the upper and lower shells 74, 72 for supporting the axle 78 on opposing ends thereof.

**[0040]** As shown in Fig. 2, a spring 80 is axially slidably mounted on the axle 78. Captured between eyelets 38 of the seat frame end portions 36, the spring 80 is sized and configured to axially bias the seat frame end portions 36 away from each other such that the seat frame 32 is maintained in either the upper detent 90 or the lower detent 92 of respective ones of the seat frame track 82. Moving the seat frame end portions 36 toward each other compresses the spring 80. When each one of the seat frame end portions 36 is placed in the upper detent 90 of respective ones of the seat frame track 82, the seat assembly 30 is maintained in the bouncer position 86, as is shown in Fig. 1. When each one of the seat frame end portions 36 is placed in the lower detent 92 of respective ones of the seat frame track 82, the seat assembly 30 is maintained in the gym position 88, as is shown in Fig. 3.

**[0041]** Referring briefly to Fig. 2b, in order to move the seat assembly 30 from the gym position 88 to the bouncer position 86, the seat frame end portions 36 are initially moved axially toward each other by externally applying pressure against the axially outwardly biasing force of the spring 80 until the seat frame end portions 36 are disengaged from the lower detents 92. The seat frame end portions 36 are then moved upwardly through the seat frame track slot 84 along a direction A, shown in Fig. 2b, by angularly rotating the seat assembly 30 relative to the base assembly 12.



[0042] Upon reaching an upper end of the seat frame track slot 84, external (i.e., manually applied) pressure that holds the seat frame end portions 36 together is released to allow the spring 80 to laterally extend the seat frame end portions 36 away from each other until the seat frame end portions 36 engage upper detents 90 of respective ones of the seat frame track 82. Once the seat frame end portions 36 are fully engaged in the upper detents 90, the biasing force of the spring 80 acts to maintain the seat frame 32 in the upper detent 90 such that the seat assembly 30 is held in the bouncer position 86. Repositioning the seat assembly 30 from the bouncer position 86 back to the gym position 88 may be achieved by reversing the above-described procedure.

[0043] Referring back to Fig. 2, formed through the upper and lower shells 74, 72 of the handle assembly 70 is a handle opening 76 sized and configured to allow a user, such as a parent, to grasp and carry the baby gym-bouncer 10. The handle opening 76 may be ergonomically shaped so as to be physiologically compatible with a human hand to allow the baby gym-bouncer 10 to be carried with a secure grip. The handle carrier may preferably be fabricated by injection molding of plastic such as polyethylene plastic although it is recognized herein that there are numerous materials and processes that may be utilized to fabricate the handle assembly 70.

[0044] The handle assembly 70 preferably has an outer surface that is generally contoured to blend with outer perimeters and overall thicknesses of the baby gym-bouncer 10 when folded down into the fully collapsed position. By contouring the handle assembly 70 in such a manner, the overall aesthetics of the baby gym-bouncer 10 may be

improved. In addition, projections may be eliminated that may otherwise catch on objects. Regardless of its configuration, it is contemplated that the outer surface of the handle assembly 70 may be contoured to have any number of alternative shapes.

**[0045]** Included with the baby gym-bouncer 10 is the toy bar assembly 50 shown in Figs. 1-3. Constructed in a manner similar to that described above for the base assembly 12 and seat assembly 30, the toy bar assembly 50 includes a toy bar frame 52 having a generally arch-shaped configuration. The toy bar frame 52 is preferably configured as a unitary structure of tubular cross-section and having opposing ends. The toy bar frame 52 is encased by toy bar padding 54 in a manner similar to that described above for the seat frame 32 and the base frame 14. The toy bar padding 54 is preferably comprised of soft, closed cell foam or rubber and extends along a length of the toy bar frame 52, as can be seen in Fig. 3. The toy bar padding 54 prevents injury to the infant that may be caused by direct contact with the toy bar frame 52. Secured to the toy bar assembly 50 at an approximate midpoint thereof is a toy bar strap 64, as shown in Fig. 2. The toy bar strap 64 may include a snap, hook and loop fastener material (e.g., Velcro), or other alternative fastening means adapted to secure the toy bar assembly 50 against the seat assembly 30 when the toy bar assembly 50 is folded down thereagainst, as shown in Figs. 4 and 5.

**[0046]** The opposing ends of the toy bar frame 52 are pivotally connected to the seat frame 32 on opposing sides thereof using a pair of toy bar hubs 60. Each one of the toy bar hubs 60 includes a socket that is sized and configured to receive one of opposing ends of the toy bar

frame 52. The toy bar hub 60 is mated to a complementary toy bar mount 58 that is configured to connect the toy bar hub 60 to the seat frame 32. As is shown in Fig. 2, the toy bar mount 58 may comprise a split sleeve member that may be integrally formed with the toy bar mount 58. Preferably hinged on a side as shown in Fig. 2, the split sleeve member is sized and configured to be complementary to the seat frame 32 such that the split sleeve member may be tightly secured to the seat frame 32 using mechanical fasteners, snaps or adhesive. However, the toy bar assembly 50 may be secured to the seat frame 32 using any suitable means. Openings may be provided in the seat frame padding 42 and the seat frame cover 44 such that the toy bar mounts 58 may protrude therefrom.

**[0047]** The toy bar hub 60 may be secured to the toy bar mount 58 using a mechanical fastener 62 such as a screw as is shown in Fig. 2. Frictional engagement of interior surfaces of the toy bar hub 60 with mating interior surfaces of the toy bar mount 58 may be achieved by tightening the screw to create slight relative axial movement therebetween. In this manner, the toy bar assembly 50 may be positioned into a variety of angular positions relative to the seat assembly 30 by first loosening the screw, rotating the toy bar assembly 50 to a desired angular orientation, then retightening the screw. Alternatively, the interior surface of each of the toy bar hub 60 and mating toy bar mount 58 may include complementary engaging surface features formed therein such as complementary tongue and groove members configured to positively maintain a particular angular orientation of the toy bar assembly 50 relative to the seat assembly 30.

[0048] As will be recognized, there are a variety of means that may be included in the baby gym-bouncer 10 that will provide the feature of selective angular adjustment of the toy bar assembly 50 relative to the seat assembly 30. Importantly, the toy bar assembly 50 is sized and configured to be folded down against the seat assembly 30 in substantially abutting contact thereagainst. Additionally, the toy bar assembly 50 is sized to conform to or within an outer perimeter of the seat assembly 30 and base assembly 12 when the baby gym-bouncer 10 is folded into the fully collapsed position as shown in Fig. 5. In this manner, protrusion of the toy bar assembly 50 from the outer perimeter is eliminated so as to increase the overall compactness of the baby gym-bouncer 10 to enhance the storability of the baby gym-bouncer 10.

[0049] Additional modifications and improvements of the present invention may also be apparent to those of ordinary skill in the art. Thus, the particular combination of parts described and illustrated herein is intended to represent only certain embodiments of the present invention, and is not intended to serve as limitations of alternative devices within the spirit and scope of the invention.